

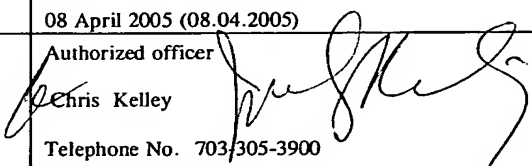
# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PU030044	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416																								
International application No. PCT/US04/01583	International filing date (day/month/year) 20 January 2004 (20.01.2004)	Priority date (day/month/year) 28 January 2003 (28.01.2003)																									
International Patent Classification (IPC) or national classification and IPC IPC(7): H04N 1/409, 1/58, 11/02, and US Cl.: 375/240.01, 240.27																											
Applicant THOMSON LICENSING S.A.																											
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p style="margin-left: 20px;">a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> (sent to the International Bureau only) a total of _____ (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																											
<p>4. This report contains indications relating to the following items:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%;"><input checked="" type="checkbox"/></td> <td style="width: 20%;">Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>				<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand 26 August 2004 (26.08.2004)		Date of completion of this report 08 April 2005 (08.04.2005)																									
Name and mailing address of the IPEA/ US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer  Chris Kelley Telephone No. 703/305-3900																									

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/US04/01583

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- ☒ the international application as originally filed/furnished
- ☒ the description:  
pages 1-40 as originally filed/furnished  
pages\* NONE received by this Authority on \_\_\_\_\_  
pages\* NONE received by this Authority on \_\_\_\_\_
- ☒ the claims:  
pages 41-44 as originally filed/furnished  
pages\* NONE as amended (together with any statement) under Article 19  
pages\* NONE received by this Authority on \_\_\_\_\_  
pages\* NONE received by this Authority on \_\_\_\_\_
- ☒ the drawings:  
pages 1-10 as originally filed/furnished  
pages\* NONE received by this Authority on \_\_\_\_\_  
pages\* NONE received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/US04/01583**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims <u>1-14</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>6, 12 and 14</u>	YES
	Claims <u>1-5, 7-11, and 13</u>	NO
Industrial Applicability (IA)	Claims <u>1-14</u>	YES
	Claims <u>NONE</u>	NO

**2. Citations and Explanations (Rule 70.7)**  
Please See Continuation Sheet

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

International application No.

PCT/US04/01583

**Box No. VII      Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:

Claim 2 is objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: The claim states 'The method o.f claim' it should state 'The method of claim'.

## Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

**V. 2. Citations and Explanations:**

Claims 1-5, 7-11 and 13 lack an inventive step under PCT Article 33(3) as being obvious over Birru et al in view of Naimpally.  
[claim 1]

As shown in Figure 2, Birru et al teaches the use of a standard (302) and a robust (307) stream for use in a transmission system (300). The streams are mpeg-2 compatible packet streams (paragraph [0029] and [0040]). As further shown in Figure 2, Birru teaches the generating of a composite signal (320). Birru does not specifically teach the encoding process or the delaying of one signal over the other and the decoding of the signal based on an error. Naimpally teaches the mpeg encoding process as shown in Figure 3A. Naimpally further teaches the delaying of one signal over the other as shown in Figure 4. Naimpally teaches the decoding is determined based on the error (channel switching), in which, the standard signal is used during an error and the robust signal is used otherwise in order to prevent a delay in visuals to a viewer (Col 4 Lines 25-45). It would have been obvious to employ the method of Birru with the method of Naimpally as Naimpally provides a means for presenting a signal in a mpeg-2 compatible packet stream and Naimpally provides a means of preventing a delay in visuals to a viewer.

[claim 2]

As shown above, Birru teaches the channel encoding of the signals (320, Fig. 2). Birru suggest the signals to be in an mpeg-2 packet format but does not teach the specific steps to obtain the desired format. Naimpally teaches the steps of mpeg encoding (110) and packetizing (114) as shown in Figure 3A. It would have been obvious to employ the method of Birru with the method of Naimpally as Naimpally teaches the method of obtaining the mpeg-2 packetized streams as required by the method of Birru.

[claim 3]

Birru teaches the standard stream is 8-VSB modulated (Paragraph [0030]). Birru does not teach the method of modulating the stream. Naimpally teaches the mpeg stream is modulated (320) as shown in Figure 3A. As shown above, it would have been obvious to employ the method of Birru with the method of Naimpally as Naimpally teaches the steps to produce the stream required by Birru.

[claim 4]

As shown above for the rejection of claims 3, Birru requires the streams to be in an mpeg-2 packetized format (paragraph [0040]). Naimpally teaches the mpeg encoding (110) and packetizing (114) as shown in Figure 3A. It would have been obvious to employ the method of Birru with the method of Naimpally as Naimpally teaches the steps to produce the mpeg stream required by Birru.

[claim 5]

Birru further teaches the robust stream is 4-VSB or 2-VSB modulated (Paragraph [0031]).

[claim 7]

Birru teaches the standard stream is backwards compatible (Paragraph [0021], and [0043]-[0044]). Birru teaches the

## Supplemental Box

generating of the composite signal (320) as shown in Figure 2. Birru does not specifically teach the robust signal being delayed. Naimpally teaches the delaying of the robust signal as shown in Figure 4, in order to provide the standard signal for quick decoding (Abstract). It would have been obvious to employ the method of Birru with the method of Naimpally in order to provide the standard signal first for quick decoding during an error situation.  
[claims 8-11]

Birru teaches the use of a receiver for receiving the composite signal (Paragraph [0021] and [0064]). Birru does not specifically show a receiver. Naimpally teaches the receiver performing the reverse operations of the encoder as shown in Figure 3B. It would have been obvious to employ the receiver of Birru with the decoding method of Naimpally in order to reverse the encoding processes performed in the encoder.  
[claim 13]

As shown above Birru teaches the use of a receiver (paragraph [0043]-[0044]). Birru does not teach the selection of a stream based on an error. As shown above for claim 1, Naimpally teaches the selection of a stream based on an error (change of channel) as required by claim 13 (Col 4 Lines 25-45).